Appendix A
COMMENT RESPONSE MATRIX

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Environmental Assessment for the Y-12 Steam Plant Life Extension Project – Steam Plant Replacement Subproject
Draft Comments

Comment #	Commentor	Comment Summary	Response (Contractor)
1	John Marsh	Commentor believes DOE should put a nuclear reactor onsite to provide power/steam for Y-12 instead of a natural gas unit because it would be cleaner.	Comment noted. This alternative was considered and was eliminated due to cost and schedule.
2	TDEC	TDEC supports DOE initiative for the Y-12 Steam Plant upgrades.	Comment noted.
3	TDEC	TDEC suggests that present and future generation wastes should be presented.	Updated with FY 2006 Waste Generation numbers.
4	TDEC	(Section 1.2) Does the waste water discharge to the East Fork Poplar Creek (EFPC)	Current steam plant operating procedures requires treatment of the liquid waste at the Steam Plant Wastewater Treatment Facility to satisfy the City of Oak Ridge Industrial and Commercial User Waste Water Discharge Permit, 1-91, for direct discharge to the Y-12 sanitary sewer system. Text updated.
5	TDEC	(Section 2.1) More description of what measures will be taken to ensure that normal operation of these tanks do not impact the environment. Also should include some discussion to address contingencies should there be a failure of these tanks.	Fuel oil storage tans and transfer of fuel oil from delivery trucks to the tanks will be located within a concrete secondary containment and transfer station structure that will conform to the Y-12 standard Y/TS-104, Standards for Primary and Secondary Containment Systems and Transfer Stations. The secondary containment structure will be sized to contain the volume of one tank plus the volume of rainwater from a 100-year, 24-hour storm event plus the appropriate fire water volume. Text updated.
6	TDEC	(Section 2.1, Site Development) Will soil characterization be part of the site development?	Soil characterization sampling and testing has been completed. The sampling and testing description along with the testing results are documented in BWXT Y-12 report RP-PJ-940107-A001, *Steam Package Plant and Oil Tank Farm Report on Site Characteristics and Sample Locations*. Text updated.

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7	TDEC	(Section 3.5.1, Groundwater Quality) What does "limited" groundwater contamination mean?	Small amount of groundwater contamination.
8	TDEC	(Section 3.5.2, Surface Water Quality) What is "TBD"? The Big Springs Water Treatment Facility is in operation. It diverts flow from Outfall 051 and discharges through a CERCLA outfall into the UEFPC	Typographical error. TBD removed and description of the Big Springs Water Treatment Facility added.
9	TDEC	(Section 3.12.1, Other Waste Types) Add to end of first sentence "under a NPDES Permit issued by the State of Tennessee."	Comment noted. Text updated.
10	TDEC	(Section 4.12.2) What is the basis for the conclusion that Alternative 2 will generate more waste than Alternative 1?	Alternative 2 would require more heavy construction to update failing systems. If Alternative 1 is selected demolition of the existing Y-12 Steam Plant would not occur immediately.
11	TDEC	(Section 4.2.2) For Alternative 1, section is misnumbered.	Comment noted. Change made.
12	TDEC	(Section 4.2.2) Will the soil be characterized following the removal of the slab and before excavation of the soil?	Soil characterization sampling and testing has been completed. The sampling and testing description along with the testing results are documented in BWXT Y-12 report RP-PJ-940107-A001, Steam Package Plant and Oil Tank Farm Report on Site Characteristics and Sample Locations. Text updated.
13	TDEC	(Section 4.2.2) Typographical error. Also, explain why excavation backfilling and placement of foundations and slabs are necessary for Alternative 2. Also provide explanation in Section 2.	Comment noted. The last sentence of first paragraph deleted. The scope of Alternative 2 does include excavation and backfill. There is excavation and backfill for replacing the existing blowdown drain line along the south side of the steam plant building. There is also some earthwork associated with storm drain modifications to improve runoff drainage on second street along the north side of the steam plant building. Upgrades to the Steam Plant Wastewater Treatment Facility also includes excavation and backfill activities relating to foundations for the building extension for the clarifier as well as a foundation for the new sulfuric acid tank. Text updated.

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14	TDEC	(Section 4.5.2) Typographical error. Explain why there is discussion of excavation.	Comment noted. Last sentence of first paragraph deleted. The scope of Alternative 2 does include excavation and backfill. There is excavation and backfill for replacing the existing blowdown drain line along the south side of the steam plant building. There is also some earthwork associated with storm drain modifications to improve runoff drainage on second street along the north side of the steam plant building. Upgrades to the Steam Plant Wastewater Treatment Facility also includes excavation and backfill activities relating to foundations for the building extension for the clarifier as well as a foundation for the new sulfuric acid tank. Text updated.
15	TDEC	(Section 4.8.3) What operation of the improved potable water system has to do with the coal-fired steam plant.	Comment noted. Text updated.
16	TDEC	Table 4.3-1. This table displays a worst case scenario of emissions from the proposed alternative. Does this scenario include the expected use of No. 2 fuel oil for 50 days a year? If so, please state this. If not, please adjust estimates to reflect the use of this alternative fuel source.	The scenario does include the expected use of No. 2 fuel oil for 50 days per year natural gas curtailment.
17	TDEC	(Sections 4.5.1 and 4.6.1) It is stated that under Alternative 1, there would be no expected impacts to the water resources or ecological resources. These statements do not appear credible given that the proposed natural gas line would have to cross EFPC. More elaboration on the methods to prevent any disturbance to these resources needs to be included to justify these statements.	The project will prepare and implement a Stormwater Pollution Prevention Plan in accordance with Tennessee Erosion and Sediment Control Handbook. The SWPP will be prepared based on the scope of the final design documents. If project land disturbing activities are planned to exceed one acre, the project will obtain a Notice of Intent approval from TDEC prior to executing land disturbing activities.
18	OR-CAP	The document has an overwhelming amount of background information on the ORR and Y-12 site that, although it may pertinent, makes it difficult to focus on the proposed project. Some of it is a review of the historic preservation considerations at Y-12.	Comment noted.

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19	OR-CAP	The draft EA evaluates the replacement of the present Y-12 steam plant with 4 natural gas fired package boilers that can also burn No. 2 fuel oil during natural gas curtailment. The document does not specify where the fuel oil will be stored nor how it will be transferred to the steam plant if needed. The presence of underground storage tanks and pipelines that might conceivably leak should be addressed in the EA. What monitoring system(s) will be in place? Also, volatile organic compound (VOC) emissions from the fuel oil delivery and storage should be estimated and presented.	The packaged boiler system would tie into existing potable water, electrical, a ntural gas, steam distribution systems and other utilities. A figure was included in the document to show the location of the proposed natural gas line replacement. Fuel oil storage tanks and transfer of fuel oil from delivery trucks to the tanks will be located within a concrete secondary containment and transfer station structure that will conform to Y-12 Complex standard, Y/TS-104, Standards for Primary and Secondary Containment Systems and transfer stations. The secondary containment structure will be sized to contain the volume of one tank, plus the volume of rainwater from 100-year, 24-hour storm events, plus the appropriate fire water volume.
20	OR-CAP	The boilers would be between Buildings 9201-2 and 9201-3 in space made available by demolishing 9104-1, -2, and -3. The fuel storage would be east of 9201-3. One parameter that has been carefully specified is for each boiler to be less than 100 million Btu per hour heat input, a threshold that would require continuous monitoring of the stack. Also, if they operate on liquid fuel other than during periods of gas curtailment, additional regulatory requirements come into play. These should be mentioned in the event of changing fuels.	Comment noted. There is no intent to change fuel. Curtailment provisions are controlled by Y-12 Complex Air Permit.
21	OR-CAP	The stack height may be an issue due to the height of air flow intakes on the adjacent buildings. The draft EA does not specify the stack height. Topographically the area is near the lowest elevation of Y-12 and very close to the base and side of a ridge between two relatively tall buildings. The potential for increased exposure to emissions due to this placement should be discussed.	Preliminary design calculations have established a stack height using EPA recognized modeling programs that consider the dimensions and locations of the adjacent buildings and their outside air intake. The final stack height will be established during the final design phase of the project.
22	OR-CAP	The site of the steam plant is not close to most of the buildings that will require steam. Relocating the facility so that it is more convenient should be evaluated.	BWXT Y-12 initiated and completed studies to determine the most efficient site for the new steam plant based on criteria that included safety, security, operations, maintenance, and modernization issues. The site identified in the EA was determined to be the best site among the available sites within the Y-12 National Security Complex.

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23	OR-CAP	The specific New Source Performance Standards (NSPS) and Maximum Achievable Control Technology (MACT) regulations applicable to the facility should be discussed as to their requirements for monitoring emissions and type of fuel that can be used.	The NSPS program establishes technology-based standards applicable to criteria pollutant emissions from new or modified stationary sources. Since the Y-12 Steam Plant package boilers capacity will be less than 100 million Btu/hr of heat input, they are subjected to Subpart Dc because they will burn only natural gas or Number 2 Fuel Oil during natural gas curtailment. Subpart Dc contains no continuous monitoring requirements. Subpart Dc applies to boilers that have a heat input rate between 10 and 100 million Bur per hour. Subpart Dc sets standards for PM, SO_2, and Opacity.
24	OR-CAP	The remediation of the existing steam plant and coal yard will need to be addressed.	Comment noted. Text added to the document stating that the steam plant and coal yard will be investigated and remediated under CERCLA.
25	OR-CAP	Has shrinking Y-12's footprint been considered in the proposal for the new steam plant? Will the site need that much steam?	Yes. BWXT conducted a study to determine the forecast steam requirements for the Y-12 National Security Complex. The study included provisions for the shrinking footprint as well as considerations for new facilities.
26	OR-CAP	Cumulative impacts are not appropriately calculated in Section 5.	EAs at Y-12 are prepared as tiered documents under the Sitewide EIS which provides a more comprehensive treatment of certain topics such as cumulative impacts. The Cumulative Impacts section, 5.0, of the Steam Plant EA was prepared at the same level of analysis as the Cumulative Impacts sections were for the Potable Water EA and the Alternate Financed Facility EA. This approach continues to be appropriate. No changes to the document are recommended unless we feel it is important to repeat in Section 5.0 the statement we make in Section 1.3 regarding the tiered nature of this document to the SWEIS.
27	OR-CAP	The References section has many web links that are no longer active. Although they may have been accessed in 2005, for a document issued in 2007, they should be updated.	References updated.

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28	OR-CAP	On page 1-3, says the EA is tiered from the Final Site-Wide EIS for Y-12, DOE/EIS-0387. This is the draft SWEIS that is not out yet. However, Page 6-1 & 6-2 references include old sitewide EIS. References should be consistent with the latest available document.	Text updated.
29	OR-CAP	On page 1-4, says a public notice was placed in newspapers. Announcement of this EA did not appear in DOE Public Involvement News. It was posted inconspicuously as a new document on the DOEIC web site no earlier than July 5.	Comment noted. In the future we will use DOE Public Involvement News to notify the public of announcements.
30	OR-CAP	On page 2-6, says grading and top soil removal will be by Soil Management Plan for the Y-12 National Security Complex (SAIC 2005). There is no SAIC 2005 in References.	This was an old reference and has been removed from the document.
31	OR-CAP	Section 3.1, The Land Use description should be checked to ensure that it is consistent with other ORR documents It says there are five categories of land use on the ORR and that future land use will continue to incorporate the principles associated with ecosystem management.	Previous NEPA documents including the Y-12 SWEIS have indicated the same language.
32	OR-CAP	Section 3.4, says that tornadoes are relatively rare, but one did strike east end of Y-12 in February 1993. The use of a pre-engineered steel building might require more evaluation.	The pre-engineered building will be designed and constructed in accordance with the requirements of DOE STD-1020 for the appropriate Performance Category natural phenomena hazard loading, which includes seismic and wind loads.
33	OR-CAP	Page 3-7, Table 3.3-1. More extensive footnotes are needed to explain the timeframes of the ambient air quality standards (e.g., ozone is the 3-year average of the fourth-highest daily maximum 8-hour average ozone concentrations measured at each monitor within an area over each year).	Additional footnotes added.
34	OR-CAP	Page 3-8, Table 3.3-2. This table should be for the entire Y-12 plant, not just the steam plant emissions. Also 2006 ASER is not available yet.	This table was prepared to show only the steam plant emissions and not the entire Y-12 Complex.

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35	OR-CAP	Page 3-9. Need to discuss ambient sampling for hydrogen fluoride for completeness.	Comment noted. It is not a requirement of Y-12's air permit to sample for hydrogen fluoride. Discussion of HF deleted from Table 3.3-1.
36	OR-CAP	Section 3.7.3. This section implies that historic preservation is limited to 9731 and 9204-3 buildings.	Comment noted.
37	OR-CAP	Section 4.8.1. "(7 operators needed?)" appears to be some sort of self-reminder to the preparer that missed editing.	Text updated.
38	OR-CAP	Section 4.12.1 has a more extensive discussion of waste management than is needed unless the building demolition (which is already underway) is part of the evaluated action.	Comment noted.
39	OR-CAP	On page 2-2, the first bullet says the information used in the study is based on the 2004 version of the Comprehensive Site Plan. That document is not listed in the reference list, however the 2007 version is. The most recent version of the plan should be used.	Text changed to reference the 2007 Comprehensive Site Plan.

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